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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
HISASHI AOKI, ET AL. : EXAMINER: DIAO, M.
SERIAL NO: 10/555,321 :
FILED: NOVEMBER 3, 2005 : GROUP ART UNIT: 2858
FOR: BATTERY DEVICE :

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal from the decision of the Examiner dated March 19, 2009, which finally rejected Claims 1 and 3-23 in the above-identified patent application. A Notice of Appeal was filed June 11, 2009.

I. REAL PARTY-IN-INTEREST

The real part-in-interest is Sony Corporation.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the assignees are aware of no appeals which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1 and 3-23 have been finally rejected. Claim 2 was canceled without prejudice or disclaimer. The rejections of Claims 1 and 3-23 form the basis for this appeal. Appendix VIII includes a clean copy of appealed Claims 1 and 3-23.

IV. STATUS OF AMENDMENTS

No amendments after final rejection have been filed.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a battery device housed in a single battery housing chamber of an electronic device. The battery device includes a case (20, Figure 1B), charging unit fixed inside the case (22, Figure 2B), and a battery side terminal (24, Figure 1B). The case has side surfaces (20A, Figure 2B) located on both ends of a width direction, an upper surface (20B, Figure 2C) and lower surface (20C, Figure 2C) located on both ends of a thickness direction, and a front surface (20D, Figure 2B) and a rear surface (20E, Figure 2B) located on both ends of a length direction. The battery side terminal 24 is disposed on the front surface of the case and connected to the charging unit 22 (paragraph 27). The battery side terminal is configured to connect to a housing chamber side terminal of the electronic device to provide electric power to the charging unit from the electronic device as said charging unit charges and to provide electric power from the charging unit to the electronic device through the battery side terminal as the charging unit discharges (paragraph 50). A first engaging recessed part 26 is formed on the front surface of the case of the battery device and a second engaging recessed part 28 is formed on the front surface of the case of the battery device (paragraphs 38 and 39). The first and second engaging recessed parts are separated in the width direction by a gap (Figure 1B).

Independent Claim 11 is directed to a battery device housed in a single battery housing chamber of an electronic device. The battery device includes a case (20, Figure 1B), a charging unit fixed inside the case (22, Figure 2B), and a battery side terminal (24, Figure 1B). The case has side surfaces (20A, Figure 2B) located on both ends of a width direction, an upper surface (20B, Figure 2C) and lower surface (20C, Figure 2C) located on both ends of a thickness direction, and a front surface (20D, Figure 2B) and a rear surface (20E, Figure 2B) located on both ends of a length direction. The battery side terminal 24 is disposed on the front surface of the case and connected to the charging unit 22 (paragraph 27). The battery side terminal is configured to connect to a housing chamber side terminal of the electronic device to provide electric power to the charging unit from the electronic device as said charging unit charges and to provide electric power from the charging unit to the electronic device through the battery side terminal as the charging unit discharges (paragraph 50). First engaging means 26 are formed on the front surface of the case of the battery device and second engaging means 28 are formed on the front surface of the case of the battery device (paragraphs 38 and 39). The first and second engaging means are separated in the width direction by a gap (Figure 1B).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The ground of rejection to be reviewed on appeal is whether Claims 1 and 3-23 are unpatentable under 35 U.S.C. §103(a) over Tohya et al. (U.S. Patent No. 4,636,703, hereinafter “Tohya”) in view of Patino et al. (U.S. Patent Application Publication No. 20050200331, hereinafter “Patino”).

VII. ARGUMENTS

Claims 1 and 3-23 are not unpatentable over Tohya in view of Patino

Claims 1 and 11 recite a battery device comprising, *inter alia*:

a charging unit fixed inside the case; and
a battery side terminal disposed on the front surface of the case and connected to the battery through the charging unit, the battery side terminal configured to connect to a housing chamber side terminal of the electronic device to provide electric power to the charging unit from the electronic device as said charging unit charges and to provide electric power from the charging unit to the electronic device through the battery side terminal as the charging unit discharges, wherein a first engaging recessed part is formed on the front surface of the case of the battery device and a second engaging recessed part is formed on the front surface of the case of the battery device, the first and second engaging recessed parts being separated in the width direction by a gap.

Tohya describes a charging apparatus including a cell accommodation frame structure 1 and a power supply casing 3 for charging batteries 101-104.¹ The frame structure 1 includes recesses 16 on opposite sides of the structure for a user to grab when plugging the device in and removing it from a power source.² The outstanding Office Action cited recesses 16 as “a first engaging recessed part” and “a second engaging recessed part,” a charging circuit within power supply casing 3 as “a charging unit,” and contact strips 13A, 13B, 14A, 14B, 34A, 34B, 35A, 35B, 36A, and 36B of Tohya as “a battery side terminal.”³ Further, the outstanding Office Action conceded that Tohya does not teach or suggest the above highlighted features, and provided two modifications to cure these deficiencies. First, the outstanding Office Action cited battery 122 of Patino being charged by charging unit 110 of Patino as describing “a battery side terminal” as recited in Claim 1.⁴ Second, the outstanding Office Action asserted that it would have been obvious to move recesses 16 from

¹See Tohya, abstract and Figures 1A and 4.

²See Tohya, column 4, line 15-19 and Figure 1A.

³See the outstanding Office Action at pages 2-3.

⁴See the outstanding Office Action at page 3.

the sides of structure 1 to “a front surface” as recited in Claim 1.⁵ It is respectfully submitted that there is no suggestion or motivation to make either of these proposed modifications.

With respect to the first assertion, Tohya clearly describes that the device is used to charge cells, *not* discharge them.⁶ In this regard, although contact strips 34A, 34B, 35A, and 35B of Tohya may be in contact with the charging circuit within power supply casing 3, the charging circuit within power supply casing 3 *never charges or discharges*, it simply passes on transformed and rectified power from power supply plug 32 to the contact strips to recharge the batteries.⁷ Thus, it is respectfully submitted that modifying the charging circuit within power supply casing 3 of Tohya as suggested by the proposed combination would be a substantial redesign of the device described in Tohya. Such a modification is contrary to well settled case law which holds that if a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

In this case, Tohya describes a standalone device for recharging batteries 101-104 when plugged into a wall outlet. The device of Tohya does not provide power to another device through power supply plug 32, it only receives power through plug 32 from a wall outlet. Making the suggested modification to include circuitry and structure to allow the device of Tohya to both recharge batteries and to deliver power would require a substantial reconstruction and redesign of the elements shown in Tohya, as well as change in the basic principle under which the Tohya construction was designed to operate. Therefore, there can be no suggestion or motivation to make such a combination. See MPEP §2143.01.

⁵See the outstanding Office Action at pages 3-4.

⁶See Tohya, Summary of the Invention.

⁷See Tohya, column 5, lines 1-6.

Further, it is unclear how the device of the proposed combination would deliver power through prongs 32. Applicant is unaware of any electronic device that receives power delivered from prongs such as prongs 32. Despite a request by the applicant in the response filed May 19, 2009, the Advisory Action dated June 1, 2009 failed to indicate what electronic device the proposed combination could provide power to. With respect to this issue, the Advisory Action stated that because the power supply casing 3 contains charging circuit parts including a step down transformer and a rectifier “thus provided charging current and therefore discharges.” Again, it is unclear how the device of Tohya which recharges batteries can be used to power another device by discharging the batteries while still in the battery recharger. In this regard, no explanation has been provided as to how the charging device “therefore discharges.”

In the Response to Arguments section of the outstanding Office Action, the assertion was made that “such a combination would be as simple as providing a housing with a power supply charging as taught by Tohya inside the charging circuit of Patino, and that does not require undue redesign.” However, it is respectfully noted that the outstanding rejection includes Tohya as the primary reference. According to the controlling case law, one evaluates whether the proposed modifications would be substantial redesigns of the primary reference or would make the primary reference unsuitable for its intended purpose. In the present case, as noted above, the proposed modification would be a substantial redesign of the primary reference which is only a battery charger. Accordingly, there is no suggestion or motivation to make the proposed modification.

With respect to the second assertion, recesses 16 are located on opposite side surfaces of structure 1 so that a person can grasp them when plugging in or removing the charging apparatus from a wall plug. Contact strips 13A, 13B, 14A, 14B, 34A, 34B, 35A, 35B, 36A, and 36B, asserted as “a battery side terminal,” are located *inside* of structure 1. Further, the

front surface recited in Claim 1 on which the first and second engaging recessed parts is located is also a surface on which the battery side terminal is disposed. Accordingly, moving recesses 16 onto a same surface as any of the contact strips would prevent a user from placing their fingers in the recesses when plugging in or removing apparatus from a wall, making the recesses 16 useless. As this modification is also a substantial reconstruction and redesign of the device of Tohya and a change to the basic principle behind providing the recesses, it is again respectfully submitted that there is no suggestion or motivation to make such a modification. Further, this modification makes the recesses unsuitable for their intended purpose. Again, there can be no suggestion or motivation to make such a modification.

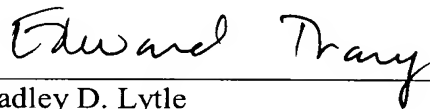
Thus, as there is no suggestion or motivation to make either of the proposed modifications to create the proposed combination, Claims 1 and 11 (and Claims 3-10 and 12-23 dependent therefrom) are patentable over Tohya in view of Patino.

Conclusion

It is respectfully requested that the outstanding rejections be REVERSED.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Edward W. Tracy, Jr.
Registration No. 47,998

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)

VIII. CLAIMS APPENDIX

Claim 1: A battery device housed in a single battery housing chamber of an electronic device, comprising:

a case having side surfaces located on both ends of a width direction, an upper surface and lower surface located on both ends of a thickness direction, and a front surface and a rear surface located on both ends of a length direction;

a charging unit fixed inside the case; and

a battery side terminal disposed on the front surface of the case and connected to the charging unit, the battery side terminal configured to connect to a housing chamber side terminal of the electronic device to provide electric power to the charging unit from the electronic device as said charging unit charges and to provide electric power from the charging unit to the electronic device through the battery side terminal as the charging unit discharges,

wherein a first engaging recessed part is formed on the front surface of the case of the battery device and a second engaging recessed part is formed on the front surface of the case of the battery device, the first and second engaging recessed parts being separated in the width direction by a gap.

Claim 2 (Canceled).

Claim 3: The battery device according to claim 1, wherein the battery device comprises a frame and a film attached to portions of the frame excluding a front and back side portions of the frame.

Claim 4: The battery device according to claim 3, wherein the film is attached to the

frame so as to wrap around the entire circumference excluding the front and back side portions of the frame; and the battery device further includes slant parts disposed on side surfaces of the frame, which correspond to the side surfaces of the case, each of the slant parts facing toward the front or back side of the frame, an amount of protrusion from the frame being increased starting from the middle position in the length direction of the frame to the front or back side portion of the frame, the slant part making continuous connection to the front and back side portion.

Claim 5: The battery device according to claim 1, wherein the first recessed engaging part is also formed on a first side surface of the case.

Claim 6: The battery device according to claim 5, wherein the second recessed engaging part is also formed on a second side surface of the case.

Claim 7: The battery device according to claim 6, wherein the first recessed engaging part is formed above the battery side terminal.

Claim 8: The battery device according to claim 1, wherein the second recessed engaging part is also formed on a second side surface of the case.

Claim 9: The battery device according to claim 8, wherein the first recessed engaging part is formed above the battery side terminal.

Claim 10: The battery device according to claim 1, wherein the first recessed engaging part is formed above the battery side terminal.

Claim 11: A battery device housed in a single battery housing chamber of an electronic device, comprising:

a case having side surfaces located on both ends of a width direction, an upper surface and lower surface located on both ends of a thickness direction, and a front surface and a rear surface located on both ends of a length direction;

a charging unit fixed inside the case; and

a battery side terminal disposed on the front surface of the case and connected to the charging unit, the battery side terminal configured to connect to a housing chamber side terminal of the electronic device to provide electric power to the charging unit from the electronic device as said charging unit charges and to provide electric power from the charging unit to the electronic device through the battery side terminal as the charging unit discharges,

wherein first engaging means are formed on the front surface of the case of the battery device and second engaging means are formed on the front surface of the case of the battery device, the first and second engaging means being separated in the width direction by a gap.

Claim 12: The battery device according to claim 11, wherein the battery device comprises a frame and a film attached to portions of the frame excluding a front and back side portions of the frame.

Claim 13: The battery device according to claim 12, wherein the film is attached to the frame so as to wrap around the entire circumference excluding the front and back side portions of the frame; and the battery device further includes slant parts disposed on side surfaces of the frame, which correspond to the side surfaces of the case, each of the slant parts facing toward the front or back side of the frame, an amount of protrusion from the

frame being increased starting from the middle position in the length direction of the frame to the front or back side portion of the frame, the slant part making continuous connection to the front and back side portion.

Claim 14: The battery device according to claim 11, wherein the first engaging means extends to a first side surface of the case.

Claim 15: The battery device according to claim 14, wherein the second engaging means extends to a second side surface of the case.

Claim 16: The battery device according to claim 15, wherein the first engaging means is formed above the battery side terminal.

Claim 17: The battery device according to claim 11, wherein the second engaging means extends to a second side surface of the case.

Claim 18: The battery device according to claim 17, wherein the first engaging means is formed above the battery side terminal.

Claim 19: The battery device according to claim 11, wherein the first engaging means is formed above the battery side terminal.

Claim 20: The battery device according to claim 11, wherein the first engaging means and the second engaging means are both open to the front surface, the upper surface, and a corresponding side surface.

Claim 21: The battery device according to claim 11, wherein the first engaging means and the second engaging means are both include a flat surface parallel to both the upper surface and the lower surface.

Claim 22: The battery device according to claim 1, wherein the first engaging recessed part and the second engaging recessed part are both open to the front surface, the upper surface, and a corresponding side surface.

Claim 23: The battery device according to claim 1, wherein the first engaging recessed part and the second engaging recessed part are both include a flat surface parallel to both the upper surface and the lower surface.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.